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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,321

11/10/2003

Charles Douglas MacPherson

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05/29/2009

E I DU PONT DE NEMOURS AND COMPANY

LEGAL PATENT RECORDS CENTER

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WILMINGTON, DE 19805

EXAMINER

TALBOT, BRIAN K

ART UNIT

PAPER NUMBER

1792

NOTIFICATION DATE

DELIVERY MODE

05/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,321	<b>Applicant(s)</b> MACPHERSON ET AL.	
	<b>Examiner</b> Brian K. Talbot	<b>Art Unit</b> 1792	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-13 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-13 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/13/09 has been entered.

2. The non-entered amendment filed 3/2/09 has been entered per filing the RCE. Claims 9 and 14-32 have been canceled. Claim 33 has been added. Claims 1-8,10-13 and 33 remain in the application.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

4. Claims 1-8,10-13 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (6,066,357) in combination with Applicant's admitted state of the art (specification, pg. 1-4) further in combination with either Long et al. (6,641,859) or Sturm et al. (7,090,890).

Tang et al. (6,066,357) teaches a method of making an organic light emitting device in which a dopant layer is formed adjacent to a light emitting host layer. The dopant is diffused

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from the dopant layer into the light emitting host material by exposure of a vapor of fluid or fluid mixture. Multiple dopants can be used. Selectively doped organic layer can be formed (abstract and col. 2, lines 13-42). Tang et al. (6,066,357) teaches that the dopant layer can be applied first to a substrate then the organic light emitting layer be applied to the dopant layer and diffusing the dopant into the organic light emitting layer. Looking at Figs. 2,6C,8D,8E,9C and 10F, the dopant layer is applied to the organic emitting layer and afterwards the uniform diffusion of the dopant into the organic emitting layer with no residue of the dopant as all of the dopant is diffused therein to form a pattern (col. 3, line 60 – col. 4, line 50 and col. 5, line 50 - col. 11, line 45).

Tang et al. (6,066,357) fails to teach the incorporation of a well structure.

Applicant's admitted state of the art (specification, pgs. 1-4) teaches selective diffusion of guest material into the host organic material as well as teaching the use of well structures to aid in the "selective" diffusion of the guest materials.

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Tang et al. (6,066,357) process by incorporating selective deposition with well structures as evidenced by Applicant's admitted state of the art (specification, pgs. 1-4) with the expectation of achieving similar success.

Tang et al. (6,066,357) in combination with Applicant's admitted state of the art (specification, pg. 1-4) fail to teach the migration of the guest material being at a temperature no greater than 40°C without an electrical field.

Long et al. (6,641,859) teaches a method of making an emissive layer for an organic light emitting device. A dopant receiving layer containing a host material is coated with a dopant layer

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and then heated to diffuse the dopant layer into the dopant receiving layer (abstract). The heating is performed at a temperature from 50-250°C but is dependent upon the dopant material utilized. (col. 4, lines 15-20 and Figs. 5a and 5b).

Sturm et al. (7,090,890) teaches modification of polymers by locally introducing dopants causing different color emission into the film by local application of a solution containing a dopant to the desired film surface to be doped (abstract). The dyed solution has a solvent that interacts with the films surface and allows for the diffusion thereof (Figs 1A, 1 2A and 2B and col. 4, lines 30-55).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Tang et al. (6,066,357) in combination with Applicant's admitted state of the art (specification, pg. 1-4) process to migrate the dopant into the surface at the claimed temperature and without electric field assistance as evidenced by Long et al. (6,641,859) or Sturm et al. (7,090,890) with the expectation of achieving similar success.

It is noted that the claimed temperature range is less than 40°C and the prior art teaches 50°C, the reference clearly teaches that the temperature is dependent upon the materials utilized and therefore would be a result effective variable that is within the skill of one practicing in the art. Furthermore, If applicant can establish a showing of criticality in the claimed pressure, the rejection will be withdrawn. See *Ex parte Khusid*, 174 USPQ 59 ("Where the principal difference between the claimed process and that taught by the reference is a temperature difference, it is incumbent upon applicant to establish criticality of that difference"). This decision is clearly analogous to pressure differences and other process parameters.

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***Double Patenting***

5. Claims 1-8,10-13 and 33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 10/889,883. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between the two application lies in the fact that the '883 claims recite forming a second organic layer over the doped first organic layer. Both sets of claims recite forming an organic layer and then incorporating a guest material into the organic layer by migrating the guest material into the organic layer.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

*Response to Amendment*

6. Applicant's arguments filed 3/2/09 have been fully considered but they are not persuasive.

Applicant argues that the prior art fails to teach to teach the migration of the guest material being at a temperature no greater than 40°C without an electrical field.

Long et al. (6,641,859) or Sturm et al. (7,090,890) teaches this limitation as detailed above.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian K Talbot/  
Primary Examiner, Art Unit 1792

BKT